

Amendments to the Abstract

Please replace the Abstract of the Disclosure starting on page 26, line 1 with the following paragraph

5 Some embodiments limit the changes to a buffer occupancy accumulator with respect to a target number of bits of the current frame. Limiting the change of the buffer occupancy accumulator will prevent one odd significantly different frame from significantly changing the quantization. Some embodiments improve upon the quantizer adjustment by making more accurate estimates of the amount of information needed to encode each macroblock. Specifically, 10 some embodiments estimate the bits per macroblock in a manner that varies from frame type to frame type. Specifically, for frame types with motion compensation, some embodiments exploit the correlation between the complexity of the macroblock and the number of bits needed. In the case of frame types without motion compensation, some embodiments impose a model that 15 biases bit allocation towards smaller activity macro blocks.